"optimum" conformation of a linear sequence, as well as to the rapid degradation of peptides injected into the animal. In the context of the invention, a study of the antigenic and immunogenic properties of retro-inverso (RI) analogues derived from the immunodominant loop of three variants of serotype A12 of FMDV was therefore undertaken. The sequences of these peptides and of the corresponding RI analogues are shown on Table 8 (note: the parent sequence of the peptide studied covers the region 141-159; a cysteine residue is added in the N-terminal position at the end of coupling).

TABLE 8

Sequences of synthetic peptides (region 141-159) derived from the immunodominant loop of three variants of serotype A12 of the virus of aphthous fever (FMDV).

FP peptide (strain USA) C-G^{141}-S-G-V-R-G-D-F-G-S-L-A-P-R-V-A-R-Q-L^{159} (SEQ ID NO:7)

FL peptide (SEQ ID NO:8) C-G^{141}-S-G-V-R-G-D-F-G-S-L-A-L-R-V-A-R-Q-L^{159}

SL peptide (strain A) (SEQ ID NO:9) C-G^{141}-S-G-V-R-G-D-S-G-S-L-A-L-R-V-A-R-Q-L^{159}

Sequences of the corresponding retro-inverso analogues

HO-m(R or S)Leu-q-r-a-v-r-(*)-a-l-s-G-(**)-d-G-r-v-G-s-G-c-NH_2

(**)	:	f	f	s
(*)	:	p	l	l

The study is divided into 3 parts:

1) Study of the antigenic properties of the analogues.

Sera of guinea-pigs immunized against the virus ("antivirion"), protein VP_1 ("anti-protein VP_1"), against peptide 141-159 (variant USA; "anti-FP peptide") and serum originating from guinea-pigs infected with the virus ("convalescent") are available. Normal serum (negative batch) of the guinea-pig serves as a control. The results are shown on Table 9. The two RIa and RIb